**Vacant Parcels and Development Potential**

| Location | Tier | Va-cant URM | Va-cant IS | Va-cant SR | Vacant SR Acres | Vacant SS & NA Acres | Vacant Residen-tial Parcels | Vacant Commer-cial Parcels | Vacant Residen-tial Acres | Vacant Commer-cial Acres | Total Private Vacant Acres | Total Private Vacant Parcels | Public Acres | Total Acres | Total Devel-oped Parcels |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Upper Keys** | | | | | | | | | | | | | | | |
| | I | 26 | 680 | 416 | 224 | 1203 | 1595 | 75 | 860 | 217 | 1077 | 1670 | 12812 | 25895 | 542 |
| | II | 0 | 1064 | 44 | 50 | 9 | 1112 | 57 | 188 | 20 | 208 | 1169 | 18 | 534 | 1132 |
| | III | 264 | 1358 | 28 | 14 | 3 | 1645 | 465 | 254 | 100 | 354 | 2110 | 97 | 2339 | 8099 |
| *Upper Keys Subtotal* | | *290* | *3102* | *488* | *288* | *1215* | *4352* | *597* | *1302* | *337* | *1639* | *4949* | *12927* | *28768* | *9773* |
| | | | | | | | | | | | | | | | |
| **Middle Keys** | | | | | | | | | | | | | | | |
| | I | 0 | 8 | 1 | 20 | 90 | 32 | 0 | 117 | 0 | 111 | 32 | 804 | 944 | 10 |
| | II | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | III | 61 | 384 | 0 | 0 | 0 | 444 | 9 | 96 | 7 | 109 | 453 | 6 | 372 | 1084 |
| *Middle Keys Subtotoal* | | *61* | *392* | *1* | *20* | *90* | *476* | *9* | *213* | *7* | *220* | *485* | *810* | *1314* | *1094* |
| | | | | | | | | | | | | | | | |
| **Big Pine and No Name** | | | | | | | | | | | | | | | |
| | I | 9 | 865 | 102 | 100 | 677 | 2074 | 6 | 910 | 2 | 912 | 2080 | 4896 | 6716 | 1431 |
| | II | 0 | 487 | 0 | 0 | 12 | 499 | 0 | 87 | 0 | 87 | 499 | 10 | 271 | 784 |
| | III | 1 | 224 | 0 | 0 | 0 | 225 | 19 | 38 | 13 | 51 | 244 | 22 | 298 | 604 |
| *Subtotal* | | *10* | *1576* | *102* | *100* | *689* | *2798* | *25* | *1035* | *15* | *1050* | *2823* | *4928* | *7285* | *2819* |
| | | | | | | | | | | | | | | | |
| **Lower Keys** | | | | | | | | | | | | | | | |
| (excluding BPK & NNK) | I | 3 | 616 | 202 | 201 | 4119 | 2270 | 24 | 4295 | 71 | 4366 | 2294 | 16939 | 24100 | 445 |
| | II | 1 | 451 | 7 | 4 | 33 | 596 | 13 | 129 | 5 | 134 | 609 | 18 | 371 | 448 |
| | III | 173 | 1363 | 51 | 25 | 7 | 1596 | 194 | 304 | 227 | 531 | 1790 | 163 | 2340 | 6175 |
| *Subtotal* | | *177* | *2430* | *260* | *230* | *4159* | *4462* | *231* | *4728* | *303* | *5031* | *4693* | *17120* | *26811* | *7068* |
| | | | | | | | | | | | | | | | |
| *Lower Keys Subtotal* | | *187* | *4006* | *362* | *330* | *4848* | *7260* | *256* | *5763* | *318* | *6081* | *7516* | *22048* | *34096* | *9887* |
| ***County Total*** | | ***538*** | ***7500*** | ***851*** | ***638*** | ***6153*** | ***12088*** | ***862*** | ***7278*** | ***662*** | ***7940*** | ***12950*** | ***35785*** | ***64178*** | ***20754*** |

**Attachment A**

**Attachment B**

***From the Monroe County Year 2010 Comprehensive Plan***

**WORK PROGRAM**

**YEAR ONE** (ending December 31, 1997)

A. Complete Phase I (data collection) for the Wastewater and Stormwater Master Plans, and secure funding for plan completion. (Reference County Objective. 901.4)

Agencies; County, DCA DEP, HRS and SFWMD.

B. Complete a conceptual plan or scope of work to develop a carrying capacity. The carrying capacity analysis shall be designed to determine the ability of the Florida Keys ecosystem, and the various segments thereof, to withstand all impacts of additional land development activities. The analysis shall be based upon the findings adopted by the Administration Commission on December 12, 1995, or more recent data that may become available in the course of the study, and shall be based upon benchmark of, and all adverse impacts to the Keys land and water natural systems, in addition to the impact of nutrients on marine resources. The carrying capacity analysis shall consider aesthetic , socioeconomic (including sustainable tourism), quality of life and community character issues, including the concentration of population, the amount of open space, diversity of habitats, and species richness. The analysis shall reflect the interconnected nature of the Florida Keys' natural systems, but may consider and analyze the carrying capacity of specific islands or groups of islands and specific ecosystems of habitats, including distinct parts of the Keys' marine system. (Ref. 1991 Stip. Settlement Agreement)

Agencies: County, DCA, DEP, HRS, DOT, GFC, SFWMD, NMS, SFRPC, EPA, USFW, Army COE, and other interested parties to includes representatives of environmental organizations and development interests.

C. Complete AWT/OSDS demonstration study and initiate rulemaking for new standards for OSDS. (Reference County Policy 901.4.3).

Agencies: HRS.

D. Complete Marathon Facilities Plan and secure funding for the facility site(s). The wastewater facilities plan should implement the most cost effective method of collecting, treating, and disposing of wastewater and shall include an investigation of the feasibility of using alternative nutrient-stripping on-site disposal systems. The development of the facilities plan shall be a component of the wastewater Master Plan as that Plan is developed.

Agencies: County, DCA, and DEP.

E. Continue cesspit elimination program with identification of Hot Spots as first priority in accordance with Objective 901.2 and seek funding for cesspit identification. Enter into an interlocal agreement with HRS to specify the responsibilities and procedures for the OSDS inspection/ compliance program as required by Policy 901.2.3. Adopt an ordinance which specifies the implementation procedures for the OSDS inspection/compliance program. The ordinance shall include authorization for HRS to inspect wastewater treatment systems on private property as required by Policy 901.2.3. (Reference County Objective 901.2).

Agencies: County, DCA, and HRS.

F. Submit status of CARL and ROGO land acquisition to the Administration Commission.

Agencies: County, Land Authority, and DEP.

G. Revise the habitat Evaluation Index (HEI) based on peer review.

Agencies: County, DCA, DEP, FGFWFC, and Federal agencies.

**YEAR TWO** (ending December 31, 1998)

A. Complete the wastewater and Stormwater Master Plans and execute interagency agreements to define construction schedule by phases. Document that significant reduction in nutrients will be achieved each year thereafter within each sub-areas. The Master Plans shall include facility plans for all proposed treatment strategies, and determine retrofit and funding requirements for HOT Spots and cesspit identified in D below.

Agencies: County, DCA, DEP, and HRS.

B. Secure funding for the carrying capacity study and initiate Phase I (data collection) of the study.

Agencies: County, DCA, and DEP.

C. Complete cesspit ID process in Hot Spots, excluding the Marathon area.

Agencies: County, DCA, and HRS.

D. Submit status of CARL and ROGO land acquisition to the Administration Commission.

Agencies County, Land Authority, and DEP.

E. Document the extent and quality of the fresh groundwater lens system on Big Pine Key; delineate the associated recharge areas; and determine the safe yield of the system. (Reference County Policy 103.1.5).

Agencies: County, DCA, SFWMD, USFWS

**YEAR THREE** (January 1, 1999 through July 12, 2000)

A. Complete and begin implementation of Wastewater Master Plan. Utilizing the findings of the Wastewater Master Plan and recommendations of the Water Quality Steering Committee relating to Hot Spots do the following: refine and prioritize areas identified as Hot Spots, determine retrofit and funding requirements for priority Hot Spots and cesspit replacement for areas outside those areas identified for central or cluster wastewater collection systems, and begin developing facility plans for priority Hot Spots. Execute interagency agreements to define facility plan, design and construction schedules for each Hot Spot facility. Establish a water quality monitoring program to document the reduction in nutrients as a result of these facilities. Complete a wastewater treatment finance plan and a service area implementation plan, and continue efforts to secure funding for Wastewater Master Plan implementation, with priority given to Hot Spots. Determine the feasibility and legal ramifications of establishing an escrow account as a means of providing long-term funding for replacing cesspits or substandard onsite sewage systems. Establish a mechanism such as special assessments, impact fees, infrastructure surcharge, or other dedicated revenues, to fund the local share of wastewater improvements in Years Four and Five. Seek to provide comparable subsidies for both wastewater collection systems and individual cesspit replacement.

Agencies: County, FKAA, DCA, DEP, DOH, SFWMD, EPA and Water Quality Protection Program Steering Committee (WQSC).

B. Secure funding for Storm Water Master Plan development, contract selected firm for development of Master Plan, and complete Phase I (data collection). Determine the feasibility of providing nutrient reduction credits for stormwater improvements.

Agencies: County, DCA, DOT, SFWMD, EPA and WQSC.

C. Conclude acquisition of North Key Largo Hammocks CARL project. Make offers to 33% of remaining private owners with property located in other CARL project boundaries.

Agencies: County, Land Authority and DEP.

D. Secure remaining funds for the carrying capacity study, conduct workshops as outlined in the Scope of Work, select prime contractor, and initiate Phase I (data collection) of the study.

Agencies: County, DCA, DEP, DOH, DOT, FFWCC, SFWMD, WQSC, SFRPC, EPA, USFWS, Army COE, and other interested parties to include representatives of environmental organizations and development interests.

E. Continue efforts to secure funding for the Marathon Facility. Complete Little Venice construc-

tion design, secure lands needed for Little Venice facility, and begin bid process and selection of construction firm. Design a water quality monitoring program to document Little Venice project impacts.

Agencies: County, FKAA, DCA, DEP, WQSC, and EPA.

F. Continue cesspit identification by providing notice to all property owners with unknown systems, outside of Hot Spots. Initiate replacement of cesspits outside of Hot Spots. Award financial assistance grants to qualified applicants using FY 1997-98 state funds to ensure a minimum of 70 cesspit replacements. Develop a low interest loan and grant program to assist all residents in replacing cesspits, with priority of funds going, in order of preference, to very low-, low- and moderate-income households. Investigate the appropriate point at which nutrient reduction credits can be awarded for future committed water quality treatment facilities and the appropriateness of transferring credits among ROGO areas.

Agencies: County, DCA, FKAA, WQSC and DOH.

G. Document the extent and quality of the fresh groundwater lens system on Big Pine Key; delineate the associated recharge areas; and determine the safe yield of the system. (Ref. County pol. 103.1.5)

Agencies: County, FKAA, DEP, DCA, SFWMD, EPA, WQSC and USFWS.

H. Develop an integrated funding plan for the purchase of land from ROGO applicants who have competed unsuccessfully for four consecutive years and applied for administrative relief.

Agencies: County.

I. The County, in conjunction with DCA, shall assess the feasibility of applying the nutrient reduction credit requirement to new commercial development.

Agencies: County and DCA.

**YEAR FOUR** (July 13, 2000 through July 12,2001)

A. Continue implementation of Wastewater Master Plan, execute interagency agreements to define construction schedule by phases, and continue developing facility plans for priority Hot Spots in each ROGO area. Secure funding to implement the Wastewater Master Plan. Document that reduction in nutrients has been achieved within each of the sub-areas.

Agencies: County, FKAA, DCA, DEP, DOH, EPA and WQSC.

B. Complete Storm Water Master Plan. Identify priority projects for implementation and seek funding for plan implementation.

Agencies: County, DCA, DEP, DOT, SFWMD, EPA and WQSC.

C. Make offers to 50% of remaining private owners with property located in CARL project boundaries.

Agencies: County, Land Authority and DEP.

D. Complete Phase II of the carrying capacity study (data analysis) and present initial recommendations to review agencies.

Agencies: County, DCA, DEP, DOH, DOT, FFWCC, SFWMD, WQSC, SFRPC, EPA, USFWS, Army COE, and other interested parties to include representatives of environmental organizations and development interests.

E. Establish baseline water quality for surface and groundwater quality potentially impacted by Little Venice project.

Agencies: County, DCA, DEP, FKAA, WQSC and EPA.

F. Complete cesspit identification and continue cesspit replacement outside of Hot Spots, with a priority of funds going, in order of preference, to low- and moderate income households; ensure that a minimum of 88 cesspits are replaced

Agencies: County, FKAA, WQSC and DOH.

**YEAR FIVE** (July 13, 2001 through July 12, 2002 )

A. Continue implementation of the Wastewater Master Plan pursuant to executed interagency agreements. Begin construction of wastewater facilities in selected Hot Spots.

Agencies: County, FKAA, DCA, DOH, DEP, EPA, and WQSC.

B. Execute interagency agreements to define construction schedule for selected storm water improvement projects. Complete land acquisition and final design for selected treatment strategies for Storm Water Master Plan.

Agencies: County, DCA, DEP, DOT, WQSC and SFWMD.

C. Conclude negotiations with all willing owners with property within CARL project boundaries. Acquire a total-to-date of 45% of the Key Deer/Coupon Bight project and 25% of the Florida Keys Ecosystems project from willing sellers.

Agencies: County, Land Authority, and DEP.

D. Complete final draft of the carrying capacity study including acceptance by review agencies.

Agencies: County, FKAA, DCA, DEP, DOH, DOT, FFWCC, SFWMD, WQSC, SFRPC, EPA, USFWS, Army COE, and other interested parties to include representatives of environmental organizations and development interests.

E. Continue eliminating cesspits and inoperative septic tanks in areas outside of Hot Spots.

Agencies: County, DOH, FKAA and WQSC.

**YEAR SIX** (July 13, 2002 through July 12, 2003)

A. Continue construction of wastewater facilities in Hot Spots begun in previous year. Contract to design and construct additional wastewater treatment facilities in Hot Spots in accordance with the schedule of the Wastewater Master Plan. Continue implementation of Wastewater Master Plan with emphasis on Hot Spots.

Agencies: County, FKAA, DEP, DOW, DCA, EPA and WQSC.

B. Initiate construction of selected projects as identified in the Storm Water Master Plan.

Agencies: County, SFWMD, DEP, DCA, DOT, EPA and WQSC.

C. Implement the carrying capacity study by, among other things, the adoption of all necessary plan amendments to establish a rate of growth and a set of development standards that ensure that any and all new development does not exceed the capacity of the county's environment and marine system to accommodate additional impacts. Plan amendments will include a review of the County's Future Land Use Map series and changes to the map series and the "as of right" and "maximum" densities authorized for the plan's future land use categories based upon the natural character of the land and natural resources that would be impacted by the currently authorized land uses, densities and intensities.

Agencies: County, FKAA, FFWCC, DCA, DEP, DOH, DOT, SFWMD, SFRPC, EPA, Army COE, WQSC, and USFWS, and other interested parties to include representatives of environmental organizations and development interests.

D. Complete the elimination of all cesspits in areas outside of Hot Spots. Agencies: County, FKAA, DOH and WQSC.

E. Develop a Keys-wide master land acquisition plan which shall include:

(1) a strategy for the acquisition of those properties which should be preserved due their habitat value as well as those other properties where future development is to be discouraged.

(2) a management plan for implementing the strategy, and

(3) a reasonable, feasible plan for securing funding for said land acquisition.

Agencies : County, Land Authority, DCA, DEP, SFWMD, Army COE, EPA, USFWS, and other interested parties to include representatives of environmental organizations and development interests.

F. Initiate and complete a collaborative process for the adoption of land development regulations, and/or comprehensive plan amendments as needed, that will strengthen the protection of terrestrial habitat through processes such as the Permit Allocation System and permitting processes, and the preservation and maintenance of affordable housing stock.

Agencies: County, DCA, DEP, FFWC, USFWS, and other interested parties to include representatives of environmental organizations and development interests.

**YEAR SEVEN** (July 13, 2003 through July 12,2004)

A. Finalize construction and begin operating wastewater facilities in Hot Spots. Continue implementation of Wastewater Master Plan with continued emphasis on Hot Spots.

Agencies: County, FKAA, DEP, DCA, DOH, EPA and WQSC

B. Continue implementing selected projects as identified in the Storm Water Master Plan.

Agencies: County, DCA, DEP, DOT, SFWMD, EPA and WQSC

**Attachment C**

***From the Monroe County Year 2010 Comprehensive Plan***

**GOAL 105**

Monroe County shall undertake a comprehensive land acquisition program and smart growth initiatives in conjunction with its Livable CommuniKeys Program in a manner that recognizes the finite capacity for new development in the Florida Keys by providing economic and housing opportunities for residents without compromising the biodiversity of the natural environment and the continued ability of the natural and made-made systems to sustain livable communities in the Florida Keys for future generations.

Objective 105.1
Monroe County shall implement smart growth initiatives in conjunction with its Livable CommuniKeys and Land Acquisition Programs which promote innovative and flexible development processes to preserve the natural environment, maintain and enhance the community character and quality of life, redevelop blighted commercial and residential areas, remove barriers to design concepts, reduce sprawl, and direct future growth to appropriate infill areas.

**Policy 105.1.1**
Monroe County shall create an economic development framework for a sustainable visitor-based economy, not dependent on growth in the absolute numbers of tourists, that respects the unique character and outdoor recreational opportunities available in the Florida Keys.

**Policy 105.1.2**
Monroe County shall prepare design guidelines to ensure that future uses and development are compatible with scenic preservation and maintenance of the character of the casual island village atmosphere of the Florida Keys.

**Policy 105.1.3**
Monroe County shall prepare development standards and amend the Land Development Regulations to limit non-residential allocations for new floor space on any one site to foster the retention and redevelopment of small businesses on the US # 1.

**Policy 105.1.4**
Monroe County shall prepare redevelopment standards and amend the Land Development Regulations to address the large number of non-conforming commercial structures that are non-compliant as to on-site parking, construction and shoreline setbacks, stormwater management, landscaping and buffers. By identifying the existing character and constraints of the different island communities, regulations can be adopted that provide incentives for redevelopment and permit the continuance of businesses while moving towards an integrated streetscape.

**Policy 105.1.5**
Monroe County shall prepare amendments to this Plan and its Land Development Regu-

lations that comprehensively revise the existing residential permit allocation system to direct the preponderance of future residential development to areas designated as an overlay on the zoning map(s) as Infill (Tier III) in accordance with Policy 105.2.2.

**Policy 105.1.6**
Monroe County shall prepare amendments to this Plan and its Land Development Regulations that comprehensively revise the existing non-residential permit allocation system in a manner that implements Policies 105.2.1 and 105.2.15 and is consistent with and furthers this Plan.

Objective 105.2
Monroe County shall implement with assistance of the state and federal governments a 20-year Land Acquisition Program to: 1) secure for conservation and passive recreation purposes remaining privately-owned environmentally sensitive lands; 2) retire development rights on privately-owned vacant lands to limit further sprawl and equitably balance the rights of property owners with the long-term sustainability of the Keys man-made and natural systems; and, 3) secure and retain lands suitable for affordable housing. This objective recognizes the finite limits of the carrying capacity of the natural and man-made systems in the Florida Keys to continually accommodate further development and the need for the significant expansion of the public acquisition of vacant developable lands and development rights to equitably balance the rights and expectations of property owners.

**Policy 105.2.1**
Monroe County shall designate all lands outside of mainland Monroe County into three general categories for purposes of its Land Acquisition Program and smart growth initiatives. These three categories are: Natural Area (Tier 1); Transition and Sprawl Reduction Area (Tier II); and Infill Area (Tier III).

1. Natural Area (Tier I): Any defined geographic area where all or a significant portion of the land area is characterized as environmentally sensitive by the policies of this Plan and applicable habitat conservation plan, is to be designated as a Natural Area. New development on vacant land is to be severely restricted and privately owned vacant lands are to be acquired or development rights retired for resource conservation and passive recreation purposes. However, this does not preclude provisions of infrastructure for existing development. Within the Natural Area designation are typically found lands within the acquisition boundaries of federal and state resource conservation and park areas, including isolated platted subdivisions; and privately-owned vacant lands with sensitive environmental features outside these acquisition areas.

2. Transition and Sprawl Reduction Area (Tier II): Any defined geographic area, where scattered groups and fragments of environmentally sensitive lands, as defined by this Plan, may be found and where existing platted subdivisions are not predominately developed, not served by complete infrastructure facilities, or not within close proximity to established commercial areas, is to be designated as a Transition and Sprawl Reduction Area. New development is to be discouraged and privately owned vacant lands acquired or development rights retired to reduce sprawl, ensure that the Keys carrying capacity is not exceeded, and prevent further encroachment on sensitive natural resources. Within a Transition and Sprawl Reduction Area are typically found: scattered small non-residential development and platted subdivisions with less than 50 percent of the lots developed; incomplete infrastructure in terms of paved roads, potable water, or electricity; and scattered clusters of environmentally sensitive lands, some of which are within

or in close proximity to existing platted subdivisions.

3. Infill Area (Tier III): Any defined geographic area, where a significant portion of land area is not characterized as environmentally sensitive as defined by this Plan, where existing platted subdivisions are substantially developed, served by complete infrastructure facilities, and within close proximity to established commercial areas, or where a concentration of non-residential uses exists, is to be designated as an Infill Area. New development and redevelopment are to be highly encouraged. Within an Infill Area are typically found: platted subdivisions with 50 percent or more developed lots situated in areas with few sensitive environmental features; full range of available public infrastructure in terms of paved roads, potable water, and electricity; and concentrations of commercial and other non-residential uses within close proximity. In some Infill Areas, a mix of non-residential and high-density residential uses (generally 8 units or more per acre) may also be found that form a Community Center.

**Policy 105.2.2**
Monroe County shall prepare an overlay map(s) designating geographic areas of the County as one of the three Tiers in accordance with the guidance in Policy 105.2.1, which shall be incorporated as an overlay on the zoning map(s) with supporting text amendments in the Land Development Regulations. These maps are to be used to guide the Land Acquisition Program and the smart growth initiatives in conjunction with the Livable CommuniKeys Program (Policy 101.20.1).

**Policy 105.2.3**
The priority for acquisition of lands and development rights under the County's Land Acquisition Program shall be as follows: Tier I (Natural Area)-first priority; Tier II (Transition and Sprawl Reduction Area)-second priority; and Tier III (Infill Area)- third priority, except acquisition of land for affordable housing shall also be a first priority. These acquisition priorities shall be applied consistent with the Policy 105.2.10 that directs the focus of the County's acquisition efforts to the acquisition or retirement of development rights of privately owned vacant platted subdivision lots within Tiers I and II. Federal, State and local funding will be used for purchasing privately owned vacant lands for Tier II.

**Policy 105.2.4**
Monroe County shall prepare a specific data base tied to its Geographic Information System, containing information needed to implement, monitor, and evaluate its Land Acquisition Program, smart growth initiatives, and Livable CommuniKeys Program.

**Policy 105.2.5**
Monroe County shall, in coordination with federal and state agencies, implement a land acquisition program to acquire all remaining privately-owned vacant lands within areas designated as a Natural Area (Tier I).

**Policy 105.2.6**
Monroe County shall implement a land acquisition program to acquire most privately owned vacant private lands within areas designated as a Transition and Sprawl Reduc-

tion Area (Tier II).

**Policy 105.2.7**
Monroe County shall implement a limited land acquisition program to acquire privately owned vacant lands with sensitive environmental features for conservation purposes and scarified properties for affordable housing within areas designated as an Infill Area (Tier III).

**Policy 105.2.8**
The preferred method for acquisition of environmentally sensitive privately owned vacant non-platted lands shall be fee simple purchase, donation, or dedication or the retirement of development rights through transfer of development rights or similar mechanisms.

**Policy 105.2.9**
The preferred method for acquisition of vacant platted lots shall be fee simple purchase, donation, or dedication or the retirement of development rights thorough transfer of development rights or similar mechanisms; however, wherever appropriate, platted lots may be purchased in partnership with adjoining property owner(s) subject to a conservation easement that may allow limited accessory residential uses.

**Policy 105.2.10**
In terms of effort, Monroe County shall primarily focus its Land Acquisition Program on the acquisition or retirement of development rights of vacant privately-owned platted lots within Tier I and Tier II and the acquisition of scarified and disturbed lands for affordable housing within Tier III. This policy recognizes the critical need for the County to aggressively address the imbalance between development expectations of private property owners and the finite carrying capacity of the natural and man-made systems in the Florida Keys.

**Policy 105.2.11**
Monroe County shall petition the federal and state governments to aggressively pursue the acquisition of all remaining privately-owned vacant lands within their park and conservation acquisition boundaries and to expand existing acquisition boundaries to include other lands in close proximity with similar environmentally sensitive features.

**Policy 105.2.12**
With respect to the relief granted pursuant to Policy 106.1 (Administrative Relief) or Policy 101.18.5 (Beneficial Use), a purchase offer shall be the preferred form of relief for any land within Tier I and Tier II, or any land within Tier III having conservation value in accordance with the criteria in Policy 101.6.5.

**Policy 105.2.13**
In implementing this Land Acquisition Program, Monroe County is only committed or financially obligated to the extent that local, state, and federal funds are available.

**Policy 105.2.14**
Monroe County shall identify and secure possible local sources to yield a steady source of funds and secure increased funding from state and federal, and/or private sources for the Land Acquisition Program and the management and restoration of acquired resource conservation lands. With the uncertainty concerning the County's ability to successfully secure sufficient funding from state and federal governments for their fair share of the

financial support for the Land Acquisition Program and the demands placed on the County's limited financial resources to address wastewater and other critical issues, it is recognized that the Land Acquisition Program may extend well beyond 20 years.

**Policy 105.2.15**
Where appropriate, as part of the Livable CommuniKeys Planning Process, Community Centers shall be designated within areas designated as Tier III (Infill Area). A Community Center is characterized as a defined geographic area with a mix of retail, personal service, office and tourist and residential uses (generally of greater than 8 units per acre). Community Centers shall be designated as receiving areas for transfer of development rights and shall receive special incentives in the non-residential permit allocation system.

Objective 105.3
Monroe County shall implement its 20-Year Land Acquisition Program and smart growth initiatives in conjunction with its Livable CommuniKeys Program and shall make appropriate amendments to this Plan and the Land Development Regulations including, but not nec-



essarily limited to the residential and non-residential permit allocation systems.
***From the Florida Keys Carrying Capacity Study***
***Final Draft Report***

## 5.0 DISCUSSION

### 5.1 TERRESTRIAL ECOSYSTEMS AND SPECIES

Land development in the Florida Keys has displaced nearly 50 percent of all upland habitats, as well as large areas of saltwater wetlands. Over 90 percent of the remaining uplands are distributed in patches of 10 acres or less. In the Florida Keys, upland patches of less than 13 acres are considered to have lost key ecological functions (Bancroft 1994). Small patches of forests show lower biodiversity, increased vulnerability to invasion by exotic plant and animal species and decreased gene flow within and among populations. Any further encroachment into areas dominated by native vegetation would exacerbate habitat loss and fragmentation. Development in the Florida Keys has surpassed the capacity of upland habitats to withstand further development.

The secondary and indirect effects of development further contribute to habitat loss and fragmentation. Little habitat remains unaffected by development's secondary effects. While difficult to quantify, indirect effects cause significant habitat degradation, especially on small patches of habitat. Any further development in the Florida Keys would exacerbate secondary and indirect impacts to remaining habitat.

Terrestrial habitats in the Florida Keys show a combination of tropical, Caribbean and temperate species that are unique to the U.S., which is exemplified by over 100 species that occur only in the Florida Keys. Habitat loss is likely the most important cause of species depletion in the area, resulting in the protected legal status of dozens of species of plants and animals. Virtually every native area in the Keys is potential habitat for one or more protected species. Two species endemic to the Lower Keys, the Lower Keys marsh rabbit and the silver rice rat, are highly restricted and likely could not withstand further habitat loss without facing extinction. The Key deer, while largely recovered from population numbers as low as 25 in the 1950s, has a restricted range and will continue to face threats to its viability if development occurs in prime habitat. In the Upper Keys, large tracts of uplands are already under government ownership, yet privately owned uplands are also potential habitat for protected species such as the Schaus swallowtail butterfly or the Key Largo woodrat. Throughout the Florida Keys, any further development of native habitats would likely negatively affect one or more protected species. Development in the Florida Keys has surpassed the capacity of several protected species to withstand the effects of further development activities.

Under current regulations, development suitability in the Florida Keys is extremely restricted. Besides privately owned parcels in infill locations or already disturbed areas, the vast majority of private lands face one or more development constraints. The FKCCS developability analysis was conservative in removing wetland parcels – over 50 percent of all private lands were removed largely due to this constraint. Development suitability was low or marginal for most of the remaining lands, due to open space requirements, lack of infrastructure or other factors.

Successful restoration of lands to create large patches of terrestrial habitats and to reestablish connec-

tivity seems improbable. Restoration would require the conversion of large developed areas to native habitat, a goal that would face legal constraints, as well as high costs, uncertain probability of success, and a long timeframe for execution. Continuing and intensifying vacant land acquisition and restoration programs may provide more and faster returns in terms of consolidating protection of habitats in the Florida Keys.

## 5.2 INFRASTRUCTURE

The six future scenarios evaluated in the study call for a small amount of growth in the next 20 years – less than 10 percent growth in the number of dwelling units and population. Therefore, incremental pressures on infrastructure capacity are also moderate over a 20-year period. However, current conditions and the evaluation of future scenarios suggest that even small amounts of growth in the Florida Keys may place stringent demands on some infrastructure capacity.

The last two annual traffic studies for Monroe County (Monroe County 2001, 2002) have estimated a residential capacity of just over 6,000 units. Large year-to-year fluctuations on both traffic volumes and median speeds, even in the absence of significant development, introduce uncertainty to any future prediction of the levels of traffic on U.S.-1. The amount of growth evaluated in the future scenarios would likely result in changes in traffic within the observed recent fluctuations. In the absence of structural improvement to U.S.-1, the level of service will continue to be close to its state-mandated standard.

Similarly, hurricane evacuation clearance times would continue to increase as population increases, unless measures are taken to improvement evacuation conditions. Improvements to U.S.-1, while resulting in lower clearance times, would add to the government costs, nutrient loadings, and indirect impacts to wildlife and habitats.

Water withdrawals in the Florida Keys doubled from 1980 to 2000; they increased by 50% in the 1990s, even though development was restricted by ROGO. In the absence of effective water conservation or reuse measures, withdrawal is likely to continue to increase in the next 20 years. Permitted capacity has already been exceeded in 1999 and 2000, and model projections suggest that permit violations would continue to occur in the future scenarios. Alternative water supplies would help meet the needs for additional water. Interim measures, such as the continuous operations of two existing reverse osmosis plants (3 MGD) or the expansion of treatment facilities, would help cover demands in the short term. In the long-term, a desalination plant could meet a growing demand for water. Implementation of a desal plant would include choosing an appropriate location, as well as significant capital and maintenance costs.

## 5.3 SOCIOECONOMIC AND FISCAL

The six future scenarios evaluated in the FKCCS contemplate small increases in permanent population, which are unlikely to affect the overall socioeconomic structure of the Florida Keys.

The increase in the number of visitors contemplated in Scenario 3 would impose additional demands on tourist-related land uses, water supply, and recreation opportunities.

In contrast, the six future scenarios would result in a disproportionate increase in government expenditures with respect to the projected increase in population. Per capita annual expenditures are likely to increase in all the scenarios, creating immediate pressure for government to increase revenue. Tax increases on both the local population and visitors would likely occur.

## 5.4 MARINE ECOSYSTEMS AND SPECIES

The existing data are insufficient to establish quantitative, predictive relationships between land use or development and the marine environment. However, there is plenty of evidence of human effects on the marine ecosystems and species in the Florida Keys.

Seagrass scars, boat groundings, beach closings, coral collisions, and poor water quality in canals and other confined waters clearly expose the effects of humans on the marine environment. The CCIAM scenario analysis strongly argues for the benefits of wastewater treatment, but other impacts are more related to resource management than to land development. Recreational opportunities in the Florida Keys attract visitors from the Keys and beyond. Once in the Keys the impacts that boaters, fishermen, snorkellers, divers and others may have on the marine resources is largely related to their behavior.

## 5.5 IMPLEMENTATION OF THE FKCCS

The FKCCS will assist state and local government in making decisions regarding amendments to the Comprehensive Plan to ensure that future development does not exceed the capacity of the county's environment and marine systems to accommodate additional impacts.

The study and the CCIAM provide a comprehensive body of knowledge and an effective analysis tool to explore the carrying capacity consequences of development strategies in the Florida Keys.

The findings of the study suggest four main guidelines for future development in the Florida Keys:

1. Prevent encroachment into native habitat. A wealth of evidence shows that terrestrial habitats and species have been severely affected by development and further impactswould only exacerbate an already untenable condition.

2. Continue and intensify existing programs. Many initiatives to improve environmental conditions and quality of life exist in the Florida Keys. They include land acquisition programs, the wastewater and stormwater master plans, ongoing research and management activities in the Florida Keys National Marine Sanctuary, and restoration efforts throughout the Keys.

3. If further development is to occur, focus on redevelopment and infill. Opportunities for additional growth with small, potentially acceptable, additional environmental impacts may occur in areas ripe for redevelopment or already disturbed.

4. Increase efforts to manage the resources. Habitat management efforts in the Keys could increase to effectively preserve and improve the ecological values of remaining terrestrial ecosystems.

**Attachment E**

## *Data and Map Sources*

- A report entitled Legal Analysis of Existing Platted Lots in Monroe County, Florida, Final Report, dated 12/10/91, prepared by Freilich, Leitner, Carlisle, & Shortlidge as a base to start the study.
- The Monroe County Land Use Regulations and Year 2010 Comprehensive Plan to determine the environmental development criteria and land use districts (Improved Subdivision (IS), Urban Residential Mobile (URM) (URM_L), or Commercial Fishing Village (CFV))
- The 11/2001 Tax Appraisers Geographic Information Systems (GIS) coverage converted to ArcInfo and modified by the GIS Administrator for the Growth Management Division (Parcel Base) joined with Tax Appraiser's Office 11/2000 database. Parcels with assigned Parcel Codes (PC) of '00' (vacant residential) and '70' (vacant institutional) were used to determine privately owned vacant lots and parcels with PC codes of '81', '82', '83', '86', '87', '88', and '89' to determine public ownership.
- GIS shapefiles created by the GIS Administrator for the Growth Management Division and modified by staff of the Monroe County Planning and Environmental Resources Department.
- The 1/19/88 Monroe County Land Use District Maps (Craig Maps) and Comprehensive Book of Errata for Land Use District Maps (June 27, 1988 to June 18, 2001) to determine current zoning.
- Real Estate Solutions aerials flown 12/2000 to determine habitat of lots in question.
- ADID GIS coverage from the GIS Administrator for the Growth Management Division to identify developed, exotic, hammock and red flag (mangroves, scrub mangroves, saltmarsh, buttonwood, freshwater pine, freshwater marsh and freshwater hardwood) habitats.
- ADID Subdivision Lot Assessment Report (Wet Lot List) to identify isolated lots within subdivision which are not depicted as developed on the ADID GIS Coverage that actually contain red flag or hammock habitats.
- Monroe County Building Department records of new modulars, houses and duplexes without a C.O. prior to 2/03 and issued after date to identify and exclude lots with active new residential permits.
- Monroe County Planning Commission approved ROGO allocations through January 8, 2003.
- Florida Natural Inventory (FNAI)'s GIS data system to ensure uniform reporting of acreage data used in the Florida Keys Ecosystem project to determine proposed and most recent state acquisition of lands in unincorporated Monroe County.
- Monroe County Land Authority information regarding proposals of land acquisition and recent land acquisition.
- December 1985 Florida Department of Transportation Aerials used to validate the existing sensitive habitat at the enactment of the Land District Regulations.

From the Monroe County Tier Maps based on Monroe County Property Appraiser Data.